

**TABLE M.5.6.1.2–5. —National Ignition Facility Accident Frequency and Risk (Median Meteorology)**

Accident	MEI			Offsite Population <sup>a</sup>		Individual Noninvolved Worker		Noninvolved Worker Population	
	Frequency (per year)	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>
Earthquake during No Action Alternative operations	$2.00 \times 10^{-8}$	$9.56 \times 10^{-12}$	$5.74 \times 10^{-15}$	$3.92 \times 10^{-9}$	$2.35 \times 10^{-12}$	$2.87 \times 10^{-11}$	$1.72 \times 10^{-14}$	$4.17 \times 10^{-9}$	$2.50 \times 10^{-12}$
Earthquake during depleted uranium shot	$2.00 \times 10^{-9}$	$1.94 \times 10^{-12}$	$1.16 \times 10^{-15}$	$4.80 \times 10^{-10}$	$2.88 \times 10^{-13}$	$5.11 \times 10^{-12}$	$3.06 \times 10^{-15}$	$6.97 \times 10^{-10}$	$4.18 \times 10^{-13}$
Earthquake during highly enriched uranium shot	$2.00 \times 10^{-9}$	$2.03 \times 10^{-12}$	$1.22 \times 10^{-15}$	$4.94 \times 10^{-10}$	$2.97 \times 10^{-13}$	$5.29 \times 10^{-12}$	$3.17 \times 10^{-15}$	$7.19 \times 10^{-10}$	$4.31 \times 10^{-13}$
Earthquake during thorium shot	$2.00 \times 10^{-9}$	$2.08 \times 10^{-12}$	$1.25 \times 10^{-15}$	$4.86 \times 10^{-10}$	$2.92 \times 10^{-13}$	$5.31 \times 10^{-12}$	$3.18 \times 10^{-15}$	$7.15 \times 10^{-10}$	$4.29 \times 10^{-13}$
Earthquake during tracer shot	$2.00 \times 10^{-9}$	$1.09 \times 10^{-12}$	$6.53 \times 10^{-16}$	$4.19 \times 10^{-10}$	$2.51 \times 10^{-13}$	$3.27 \times 10^{-12}$	$1.96 \times 10^{-15}$	$4.59 \times 10^{-10}$	$2.75 \times 10^{-13}$
Earthquake during plutonium without yield shot	$2.00 \times 10^{-9}$	$3.30 \times 10^{-12}$	$1.98 \times 10^{-15}$	$1.09 \times 10^{-9}$	$6.55 \times 10^{-13}$	$9.99 \times 10^{-12}$	$5.99 \times 10^{-15}$	$1.48 \times 10^{-9}$	$8.90 \times 10^{-13}$
Earthquake during plutonium with yield shot	$2.00 \times 10^{-9}$	$1.80 \times 10^{-12}$	$1.08 \times 10^{-15}$	$6.32 \times 10^{-10}$	$3.79 \times 10^{-13}$	$5.39 \times 10^{-12}$	$3.23 \times 10^{-15}$	$7.93 \times 10^{-10}$	$4.76 \times 10^{-13}$

Source: LLNL 2003d.

<sup>a</sup> Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.<sup>b</sup> Increased likelihood of a latent cancer fatality.<sup>c</sup> Increased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.